## **RMSC Program Overview**

The Records Management Service Components (RMSC) Program is a collection of projects to:

- 1. Partner with cabinet, executive department, and independent agencies (See Table 1) in CY 2005 to identify, document, normalize and prioritize those core Records Management requirements that can be supported by software service components.<sup>1</sup>
- "Get the word out" to academia and industry that the Government has collectively agreed on a set of RMSC requirements for their review and comment.
- Continue coordination with Federal Agency Partners during CY 2005 and CY 2006 in order to acquire one or more records management service components for submission to the Office of Management and Budget's (OMB's) Federal Enterprise Architecture (FEA) component repository.
- 4. Continue to make available reports and information about the RMSC activities to Federal Agencies seeking help for their technology acquisitions.

| Treasury         | HHS                            |  |
|------------------|--------------------------------|--|
| EPA              | GSA                            |  |
| Labor            | Energy                         |  |
| Agriculture      | Homeland Security              |  |
| Commerce         | Social Security Administration |  |
| DoD/OSD          | Transportation                 |  |
| Veterans Affairs | NASA                           |  |
| State            | Housing & Urban Development    |  |
| Justice          | Interior                       |  |

Table 1 – Partner Federal Agencies

The overall objectives of the RMSC Office are to facilitate acquisition of RMSCs that can be used to provide interoperable Records Management functionality in any agency system that creates, receives, and manages electronic records in accordance with the FEA and with applicable laws and regulations.

[A records management service component is a piece of software that provides services that support the creation, management, transfer, and destruction of electronic records within a computing environment.]

<sup>&</sup>lt;sup>1</sup> This activity, the requirements development project, additionally supported NARA's E-Government Electronic Records Management (ERM) initiative #24 which was closed 2<sup>nd</sup> qtr FY 2005.

## Requirements Development Overview – A Communications Bridge

Fundamental to the acquisition of RMSCs is understanding between the records management community that has functional requirements of "*What* needs to be done" and the engineering community that can provide "the *How*" technologies that can do it. Bridging the understanding – translating if you will – between the two communities has been the work of the RMSC Office. It has been accomplished by two distinct projects: the requirements development project (February 2004 – March 2005) and the use case development project (April – July 2005).

In the first project 18 cabinet, executive department, independent agencies and NARA subject matter experts agreed upon a set of core records management activities supportable in a component—based architecture. Federal Agency participants included enterprise architecture, general counsel, life cycle management, policy, analysts, and records management stakeholders. Using interactive Groupware decision support technology participants identified and agreed on eight (8) core records management activities that could be supported by components and identified 21 functions and proposed 33 attributes for supporting these functions and published them on March 31, 2005, Final Report.<sup>2</sup>

| Records Management<br>Component | Definition   |
|---------------------------------|--|
| Capture Record                  | Capture information with associated attributes in an electronic system.  |
| Assign Disposition              | Using an established disposition authority, assign the disposition schedule, item number, and disposition instructions to the record.  |
| Categorize Record               | Utilizing agency business rules, assign an appropriate descriptive label to the records to facilitate management in an electronic system.  |
| Search Repository               | Query all or selected system repositories of records (transitory, temporary, and permanent) across the enterprise for content and/or attributes, in order to determine the existence and location of matching records. |
| Retrieve Record                 | Using the search results, allow for the selective display of the full record and/or associated attributes for an authorized purpose.   |
| Ensure Authenticity             | Ensure the acceptability of a record as genuine, based on its characteristics such as structure, content, and context.   |
| Associate Record                | Provide the capability to associate a record to one or more other records through a Record Association attribute. <sup>3</sup>   |

<sup>&</sup>lt;sup>2</sup> Records Management Service Components, Requirements Development Project, Final Report, March 31, 2005.

<sup>&</sup>lt;sup>3</sup> This activity allows for the creation of a Case File by linking the records of the case file. It allows for the linking of a record that was used to create a redacted or declassified record in the record declassification

| Records Management Component | Definition   |
|------------------------------|--|
| Execute Disposition          | Implement destruction, transfer, or continued retention of a record in accordance with the established disposition authority. After validation that the disposition action is valid, execute the disposition action, and record the transaction. |

Table 2 - Records Management Service Components and Definitions

Federal Agency Participants recognized the work published in their March 31, 2005, Final Report was the first step in conveying their requirements (the *What*) to the developer, vendor and operating system communities. Some components were too general and needed to be broken out (<u>capture record</u> and <u>associate record</u>), others needed to be pulled together (<u>assign disposition</u> and <u>execute disposition</u>). At least one was addressing a records management requirement (archival bond) but was pushing towards a specific implementation (the *How*) and naming it after that approach (<u>categorize record</u>). Last, two components required services that are already being met in the marketplace (<u>search repository</u> and <u>retrieve record</u>). Federal Agency Partners requested the RMSC Office take their work and transition it to an engineering notation. This initiated the second project to translate functional requirements into implementible specifications.

In accordance with this request the RMSC Office initiated a follow–on session with a subset of agency participants and NARA experts who volunteered to clarify the functions and draft them in a notation accepted by the engineering community. This notation – Use Case – requires a structured narrative using the concepts and vocabulary of the business domain (records management), a sequence of interactions (main flow) that take place between users (called actors) and the system (RMSCs) to satisfy functional requirements. Use case includes possible variants of the main flow called alternate and sub flows that support the outcome as well as sequences that identify failure of the main flow. Use case includes preconditions necessary to start the activities of the main flow, functional requirements, glossary terms, and references.

The RMSC Office examined and analyzed the information, concepts, ideas and comments from the work of the use case participants, the five session reports (January through March 2005), the March 31, 2005, Final Report, and comments from NARA offices during the RID process. This activity further supported the transition of getting from "the *What*" to a "*How*".

The July 20, 2005, Technical Report, provides context and a level of detail about the business requirements that allow the functional expert and developer to collaborate and for both to understand each other. This report acts as a

process. It allows for the linking of a record used to create to response to an information request such as FOIA. Although outside the scope of this work, it is anticipated that it might be used to associate the body of a record to its attachments. [footnote from March 31 report].

<sup>&</sup>lt;sup>4</sup> RMSC Program, Technical Report, Functional Requirements and Attributes for Records Management in a Component-Based Architecture, July 20, 2005.

"translator" between the functional expert and the developer. It allows the functional expert to explain, using their own concepts and language, "What" they want the component to do or how it is to act and the developer to provide a solution "How" that can be tested in an environment and in a way that is understandable and acceptable by the functional expert. It also discusses RMSCs in relation to other RM standards, guidance, IT architecture and the records life cycle.

In order to demonstrate to Federal Agency partners and NARA experts that the RMSC Office completed the task of transitioning their work to an engineering notation and a level of detail necessary to start acquisition activities (e.g. RFI, RFP), the following table is provided to show traceability.

| 3/31<br>Records<br>Management<br>Component | 7/20 Records Management Service Component | Purpose   | Comments   |
|--|---|---|--|
| Capture<br>Record                          | Record Capture                            | Identifies the record creator, date set aside, and unique identifier  | - evidences archival concept of reliability  |
| component                                  | Provenance                                | Ties the record to the circumstances of its creation at the time of creation and throughout its life cycle  | - evidences the person,system, & the agency in which the record was created or received, record keeper responsible for the record's custody, and date record keeper assumed that responsibility - evidences provenance across time as well as the cardinality between an agency and its components |
| Categorize<br>Record<br>component          | Archival Bond                             | Identifies the connection between one record that is evidence of a business act, transaction, or process, to one or more previous and subsequent records resulting from the same type business act, transaction, or process within a specific time period | - allows keeping of like records together in meaningful groupings or aggregations, whether by type of document, transaction, service, subject, code, etc the exact mode of designating such groupings, whether by categorization schema, file plan, etc., is determined by business requirements   |

| 3/31 Records Management Component   | 7/20 Records Management Service Component | Purpose  | Comments   |
|-------------------------------------|---|--|--|
| Ensure<br>Authenticity<br>component | Authenticity                              | Provides the initial benchmark that creates an Authenticated Record by which all subsequent validations of authenticity are made throughout the entire life cycle of the record  | - evidences that a record is what it purports to be, in origin or authorship, that it was genuine and authoritative at the time it was created, sent, or received and that the actors party to it were authorized to do so (ISO 15489 & IP1)   |
| Associate<br>Record<br>component    | Case File                                 | Provides for linking items related because of a business act, transaction, case, investigation, etc. to form a Case File. Provides for uniquely identifying relationships between a Case File and a Case File Part <sup>5</sup>  | - evidences the record creator, date set aside, and unique identifier of a collection of documents (a file) relating to a specific action, transaction, event, person, place, project, investigation or other subject  |
|                                     | Reference                                 | Provides for linking a record or records to another or other records for various business purposes (usually a business act or transaction) while maintaining independent management of each record in the association. Provides for breaking the link of a record or records to another or other records that were related because of a business act or transaction. | Examples: 1: linking a request for information with both the record used to respond to the information request and the records used to create the response 2: linking a redacted record used in a response with its originating record(s), providing context for redaction and allowing for consistent responses to similar requests |

<sup>&</sup>lt;sup>5</sup> Case File Part is used as a neutral term without engaging in the debate whether items in a Case File are considered documents or records [footnote from July 20 report].

| 3/31 Records Management Component                          | 7/20 Records Management Service Component | Purpose  | Comments  |
|--|---|--|---|
| Assign Disposition component Execute Disposition component | Disposition                               | Ensures a record is associated to a Disposition Instruction and a Disposition Authority and tracks changes to Disposition Instruction and Disposition Authority. | - facilitates management of the Scheduled Record in accordance with the Disposition Authority, including updates, suspenses, removal of suspenses, and making the Scheduled Record available for transfer or destruction in accordance with the Disposition Instruction |
| Search<br>Repository                                       | N/A                                       |  | - component exists outside records management   |
| Retrieve<br>Record   | N/A                                       |  | - component exists outside records management   |

Table 3 – Component Association of the Final Report and the Technical Report

The July 20, 2005, Technical Report along with the March 31, 2005, Final Report supports the transition from the functional viewpoint "*What* needs to be done" into an accepted engineering notation that allows vendors, developers, and operating system owners to design "*How* it will be done". These two reports provide the basis for engaging academia and industry for their feedback on the soundness and completeness of the proposed components and their functional requirements.